

## REMARKS

Claims 1 - 16 are pending in the application. Claims 1 - 16 have been rejected.

Claims 12 and 13 stand rejected under 35 U.S.C. § 112, second paragraph. Claim 13 has been amended to address this rejection. Additionally, Claims 12 and 13 stand rejected based upon the use of the term “implicated”. This rejection is respectfully traversed. The term “implicate” is defined by Merriam Webster Dictionary as to involve as a consequence, corollary or natural inference. Accordingly, it is respectfully submitted that when evaluating whether components from the set of components are implicated based upon an identified innovation risk, as required by claim 12, or based upon an identified risk due to a supplier concentration, as required by claim 13, the components from the set of components are involved as a consequence of the identified innovation risk or the identified risk due to a supplier concentration.

Claims 1 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Beauchesne, U.S. Patent No. 6,128,626 (Beauchesne) in view of Hendrick, et al. “Production/Operations Management,” Richard D. Irwin, Inc., 1985, Chapter 11, pages 226-244 (Hendrick).

Claims 2-8 and 10-16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendrick in view of Beauchesne.

Claim 9 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hendrick in view of Beauchesne and in further view of Baseman et al., U.S. Publication No. 2002/0147666 (Baseman). These rejections are respectfully traversed.

The present invention, as set forth by independent claim 1, relates to a computer implemented method of identifying potential risk due to potential disruptions in material supply to a manufacturing facility. The method includes identifying a component for an assembled product, the component being purchased from a supplier, where identifying the component includes identifying the supplier and a manufacturer's part number of the component, storing an identity of the component, and identifying potential risk due to potential disruptions in material

supply of the component. The potential risk due to potential disruptions in continuity of material supply, including risks associated with geopolitical risk, capital cycle risk and innovation risk.

The present invention, as set forth by independent claim 2, relates to a computer implemented method of identifying potential risk due to potential disruptions in material supply to a manufacturing facility. The method includes determining a set of components for an assembled product, storing the set of components, determining a set of sub-components for the set of components; storing the set of sub-components, combining the set of components and the set of sub-components, and identifying potential risk due to potential disruptions in material supply of a component from the set components and the set of sub-components. The potential risk due to potential disruptions in continuity of material supply, including risks associated with supplier power risk, geopolitical risk, capital cycle risk and innovation risk.

The present invention, as set forth by independent claim 47, relates to a computer implemented method of identifying potential risk, the risk due to potential disruptions in material supply to a manufacturing facility. The method includes identifying a component for an assembled product wherein the component is purchased from a supplier and identifying the component includes identifying the supplier and a manufacturer's part number of the component. The identifying the component further includes identifying a geographic location from which the component is supplied. The method further includes storing an identity of the component, and identifying potential risk due to potential disruptions in continuity of material supply of the component where the identifying potential risk includes evaluating geopolitical risk based upon geographic concentration and a risk associated with the geographic location.

Beauchesne relates to storing information pertaining to manufacturing assembly information which may be combined to produce a bill of materials document. More specifically, Beauchesne discloses a database which contains table structures for storing a product directory index and a number of product related information entries, which are used to generate a bill of materials document for a particular user designated customer product. Beauchesne also discloses a selection menu facility component and a data selection component. The selection menu facility component enables an operator to access the product directory index for obtaining a number of key information values pertaining to a particular printed circuit board assembly. These values are

used by the data selection component in searching and extracting from the database tables as a function of the states of predefined key values contained in the table entries, all of the pertinent information entries needed to generate and display a bill of materials document.

Hendrick relates to material requirements planning (MRP) in the context of production management. Hendrick discloses bills of materials and product structure trees. (See e.g., Hendrick p. 230, 231 and Figure 11-3.) Hendrick further discloses requirements of a data base that is used for material requirements planning.

The Examiner cites to pages 229 and 230 of Hendrick when setting forth that Hendrick discloses identifying potential risk due to potential disruptions in supply of a component. This portion of Hendrick discusses independent and dependent demand. For example, Hendrick sets forth:

if we recognize the independent-dependent demand relationships between the finished products and components, then we can *calculate how many* of these dependent items we need if we know how many finished file cabinets and spare handles are call for from the master production schedule. For example, if our master schedule calls for 500 finished and packed cabinets, then we can *calculate* that we need 1,000 painted drawers – or perhaps 1,050, if the scrap rate on this part is 5 percent. (Hendrick, Page 229, emphasis in original.)

This portion of Hendrick also discusses lead times. For example, Hendrick sets forth:

Since lead times for internal manufacture and for purchased items can differ widely, the timing, or *when* questions, require methods to coordinate and manage lead times in an efficient way so that the right materials and parts are available at the right times – not too late, and not too early. For if they are too late, production is held up, capacity is idle, and orders are late. If materials arrive too early, unnecessary inventory carrying costs are incurred. (Hendrick, Page 230, emphasis in original.)

However, while Hendrick discloses independent and dependent demand as well as lead times, Hendrick does not disclose *identifying* potential risk due to potential *disruptions in continuity of material supply* of a component, as required by claim 1, or of a component from a set of components and a set of sub-components, as required by claim 1. Claims 1 and 2 have been amended to specify that the potential disruptions in continuity of material supply include risks associated with geopolitical risk, capital cycle risk and innovation risk. It is respectfully submitted that Hendrick does not disclose or suggest identifying potential risk due to potential

disruptions in continuity of material supply where the potential disruptions include *risks associated with geopolitical risk, capital cycle risk and innovation risk*.

Baseman discloses a value-based framework for managing inventory which allows firms to set risk and return targets for inventory related capital investments and operational management. A set of possible inventory investments is generated, and a value of possible inventory investments is then computed. The value of possible inventory investments is computed by first decomposing cash flows associated with the inventory investment into a combination of cash flows that can be represented by a portfolio comprised of long and short positions in an underlying asset. Then a valuation methodology is used to compute the value of each long and short position in the portfolio. The values of each long and short position in the portfolio is summed to determine a value of the portfolio. The value of the inventory investment is set equal to the value of the portfolio. An inventory investment with a best value is selected.

Beauchesne, Hendrick, and Basesman, taken alone or in combination, do not teach or suggest a computer implemented method of identifying potential risk due to potential disruptions in material supply to a manufacturing facility where the method includes *identifying potential risk due to potential disruptions in material supply of the component where the potential risk is due to potential disruptions in continuity of material supply, including risks associated with geopolitical risk, capital cycle risk and innovation risk*, all as required by claim 1. Accordingly, claim 1 is allowable over Beauchesne, Hendrick, and Basesman.

Beauchesne, Hendrick, and Basesman, taken alone or in combination, do not teach or suggest a computer implemented method of identifying potential risk due to potential disruptions in material supply to a manufacturing facility where the method includes identifying *potential risk due to potential disruptions in material supply of a component from the set components and the set of sub-components much less where the potential risk due to potential disruptions in continuity of material supply includes risks associated with geopolitical risk, capital cycle risk and innovation risk*, all as required by claim 2. Accordingly, claim 2 is allowable over Beauchesne, Hendrick, and Basesman. Claims 3 - 16 depend from claim 2 and are allowable for at least this reason.

Beauchesne, Hendrick, and Basesman, taken alone or in combination, do not teach or suggest a computer implemented method of identifying potential risk, the risk due to *potential disruptions in material supply* to a manufacturing facility, much less such a method which includes *identifying a geographic location from which the component is supplied* and identifying potential risk due to potential disruptions in continuity of material supply of the component where *the identifying potential risk including evaluating geopolitical risk based upon geographic concentration and a risk associated with the geographic location*, all as required by claim 47. Accordingly, claim 47 is allowable over Beauchesne, Hendrick, and Basesman.

## **CONCLUSION**

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the examiner is requested to telephone the undersigned.

The Commissioner is authorized to deduct any additional fees which may be necessary and to credit any overpayment to Deposit Account No. 502264.

I hereby certify that this correspondence is being electronically submitted to the COMMISSIONER FOR PATENTS via EFS on May 10, 2007.

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Respectfully submitted,

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